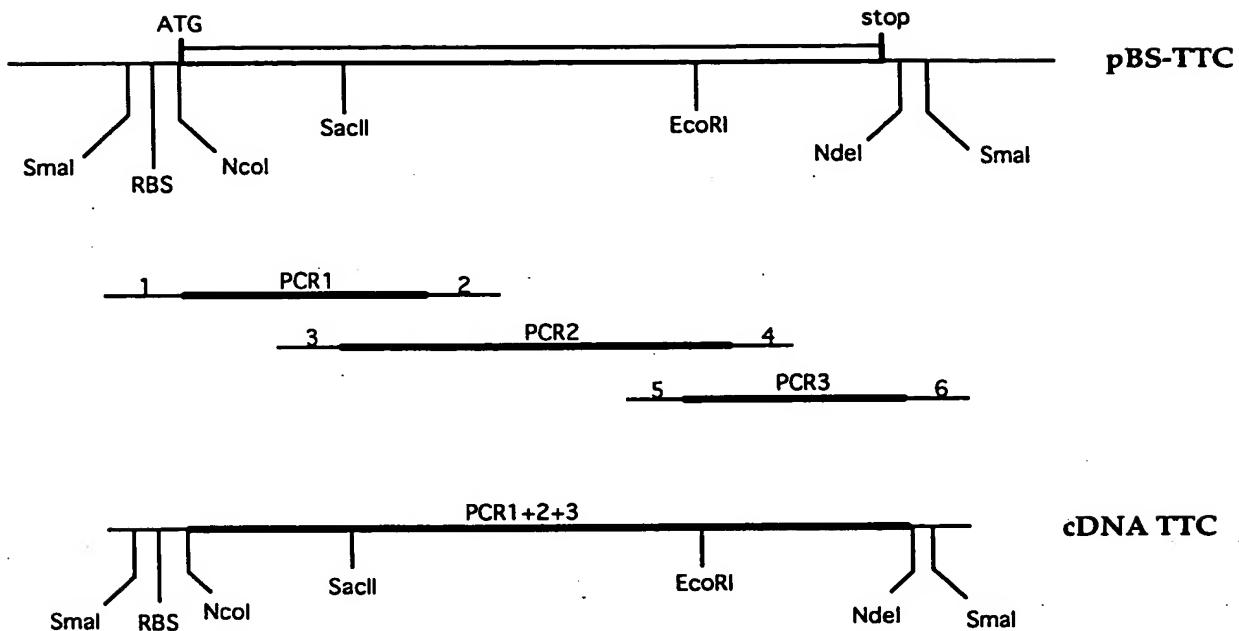


SK-TTC	→ Genes		
DNA	sequence	1600 b.p.	ggaaacagctatgaccatgtacgccaagctcgaaaattaaaccctcactaaagggaacaaaaggctggaggctcggttacccg Linear
81	ggccacc ATG GTT TTT TCA ACA CCA ATT CCA TTT TCT TAT TCT TCT AAA AAT CTG GAT TGT TGG	141	
1	M V F S T P I P F S Y S K N L D C W	18	
142	GTT GAT AAT GAA GAA GAT ATA GAT GTT ATA TTA AAA AAG AGT ACA ATT TTA AAT TTA GAT	201	
119	V D N E E D I D V I L K K S T I L N L D	38	
202	ATT AAT AAT GAT ATT ATA TCA GAT ATA TCT GGG TTT AAT TCA TCT GTA ATA ACA TAT CCA	261	
39	I N N D I S D I S G F N S S V I T Y P	58	
262	GAT GCT CAA TTG GTG CCC GGA ATA AAT GGC AAA GCA ATA CAT TTA GTA AAC AAT GAA TCT	321	
59	D A Q L V P G I N G K A I H L V N N E S	78	
322	TCT GAA GTT ATA GTG CAT AAA GCT ATG GAT ATT GAA TAT GAT ATG TTT ATT AAT TTT	381	
79	S E V I V H K A M D I E Y N D M F N N F	98	
382	ACC GTT AGC TTT TGG TGT AGG GTT CCT AAA GTA TCT GCT AGT CAT TTA GAA CAA TAT GGC	441	
99	T V S F W L R V P K V S A S H L E Q Y G	118	
442	ACA AAT GAG TAT TCA ATA ATT AGC TCT ATG AAA CAT AGT CTA TCA ATA GGA TCT GGT	501	
119	T N E Y S I I S M K H S L S I G S G	138	
502	TGG AGT GTA TCA CTT AAA GGT AAT AAC TTA ATA TGG ACT TTA AAA GAT TCC GCG GGA GAA	561	
139	W S V S L K G N N L I W T L K D S A G E	158	
562	GTT AGA CAA ATA ACT TTT AGG GAT TTA CCT GAT AAA TTT AAT GCT TAT TTA GCA AAT AAA	621	
159	V R Q I T F R D L P D K F N A Y L A N K	178	
622	TGG GTT ATA ACT ATT ACT AAT GAT AGA TTA TCT TCT GCT AAT TTG TAT ATA AAT GGA	681	
179	W V F I T I T N D R L S S A N L Y I N G	198	
682	GTA CTT ATG GGA AGT GCA GAA ATT ACT GGT TTA GGA GCT ATT AGA GAG GAT AAT ATA	741	
199	V L M G S A E I T G L A I R E D N N I	218	

FIG. 1A

742	ACA	TTA	AAA	CTA	GAT	AGG	TGT	AAT	AAT	CAA	TAC	GTT	TCT	ATT	GAT	AAA	TTT	AGG	801		
219	T	L	K	L	D	R	C	N	N	Q	Y	V	S	I	D	K	F	R	238		
802	ATA	TTT	TGC	AAA	GCA	TTA	AAT	CCA	AAA	GAG	ATT	GAA	AAA	TTA	TAC	ACA	AGT	TAT	TTA	861	
239	I	F	C	K	A	L	N	P	K	E	I	E	K	L	Y	T	S	L	S	258	
862	ATA	ACC	TTT	TTA	AGA	GAC	TTC	TGG	GGA	AAC	CCT	TTA	CGA	TAT	GAT	ACA	GAA	TAT	TTA	921	
259	I	T	F	L	R	D	F	W	G	N	P	L	R	Y	D	T	E	Y	L	278	
922	ATA	CCA	GTA	GCT	TCT	AGT	TCT	AAA	GAT	GTT	CAA	TTC	AAA	AAT	ATA	ACA	GAT	TAT	ATG	981	
279	I	P	V	A	S	S	K	D	V	Q	L	K	N	I	T	D	Y	M	Y	298	
982	TTG	ACA	AAT	GCG	CCA	TCC	TAT	ACT	AAC	GGA	AAA	TTG	AAT	ATA	TAT	TAT	AGA	AGG	TIA	1041	
299	L	T	N	A	P	S	Y	T	N	G	K	L	N	I	Y	Y	R	R	L	318	
1042	AAT	GGA	CTA	AAA	TTT	ATT	ATA	AAA	AGA	TAT	ACA	CCT	AAT	AAT	GAA	ATA	GAT	TCT	TTT	1101	
319	N	G	L	K	F	I	I	K	R	Y	T	P	N	N	E	I	D	S	F	338	
1102	AAA	TCA	GGT	GAT	TTT	ATT	AAA	TTA	TAT	GTA	TCA	TAT	AAC	AAT	AAT	GAG	CAC	ATT	GTA	1161	
339	K	S	G	D	F	I	K	L	Y	V	S	Y	N	N	E	H	I	V	G	358	
1162	TAT	CCG	AAA	GAT	GGA	AAT	GCC	TTT	AAT	CTT	GAT	AGA	ATT	CTA	AGA	GTA	GGT	TAT	AAT	1221	
359	Y	P	K	D	G	N	A	F	N	N	L	D	R	I	L	R	V	G	Y	378	
1222	GCC	CCA	GGT	ATC	CCT	CTT	TAT	AAA	AAA	ATG	GAA	GCA	GTA	AAA	TTG	CGT	GAT	TTA	AAA	ACC	1281
379	A	P	G	I	P	L	Y	K	M	E	A	V	K	L	R	D	L	K	T	398	
1282	TAT	TCT	GTA	CAA	CTT	AAA	TTA	TAT	GAT	GAT	AAA	AAT	GCA	TCT	TTA	GGA	CTA	GTA	GGT	ACC	1341
399	Y	S	V	Q	L	K	L	Y	D	D	K	N	A	S	L	G	L	V	G	418	
1342	CAT	AAT	GGT	CAA	ATA	GGC	AAC	GAT	CCA	AAT	AGG	GAT	ATA	TTA	ATT	GCA	AGC	AAC	TGG	1401	
419	H	N	G	Q	I	G	N	D	P	N	R	D	I	L	I	A	S	N	W	438	
1402	TTT	AAT	CAT	TTA	AAA	GAT	AAA	ATT	TTA	GGA	TGT	GAT	TGG	TAC	TTT	GTA	CCT	ACA	GAT	1461	
439	F	N	H	L	K	D	K	I	L	G	C	D	W	Y	F	V	P	T	D	458	
1462	GGA	TGG	ACA	AAT	GAT	<u>TAA</u>	acagattgtatgtttcatgacatatgcggccggatcccttagtgcggatcgagg	*	(SEQ ID NO:2)	(SEQ ID NO:1)	1535										
459	G	W	T	N	D	*	(SEQ ID NO:2)	(SEQ ID NO:1)	1600	464											

FIG. 1B



TTC cDNA isolation:

The TTC cDNA was isolated from a Clostridium Tetani strain using Polymerase Chain Reaction. We used a three times PCR to generate three overlapping fragments respectively of 465 bp (PCR1; primer 1: 5'-CCC CCC GGG CCA CCA TGG TTT TTT CAA CAC CAA TTC CAT TTT CTT ATT C-3' (SEQ ID NO:4) & primer 2: 5'-CTA AAC CAG TAA TTT CTG-3' (SEQ ID NO:5), of 648 bp (PCR2; primer 3: 5'-AAT TAT GGA CTT TAA AAG ATT CCG C-3' (SEQ ID NO:6) & primer 4: 5'-GGC ATT ATA ACC TAC TCT TAG AAT-3' (SEQ ID NO:7) and of 338 bp (PCR3; primer 5: 5'-AAT GCC TTT AAT AAT CTT GAT AGA AAT-3' (SEQ ID NO:8) & primer 6: 5'-CCC CCC GGG CAT ATG TCA TGA ACA TAT CAA TCT GTT TAA TC-3' (SEQ ID NO:9), and each fragment was sequentially cloned into pBluescript KS+ to produce plasmid pBS-TTC. The upstream primer 1 contained the Ribosome Binding Site (RBS) and translation initiation signals.

FIG. 2

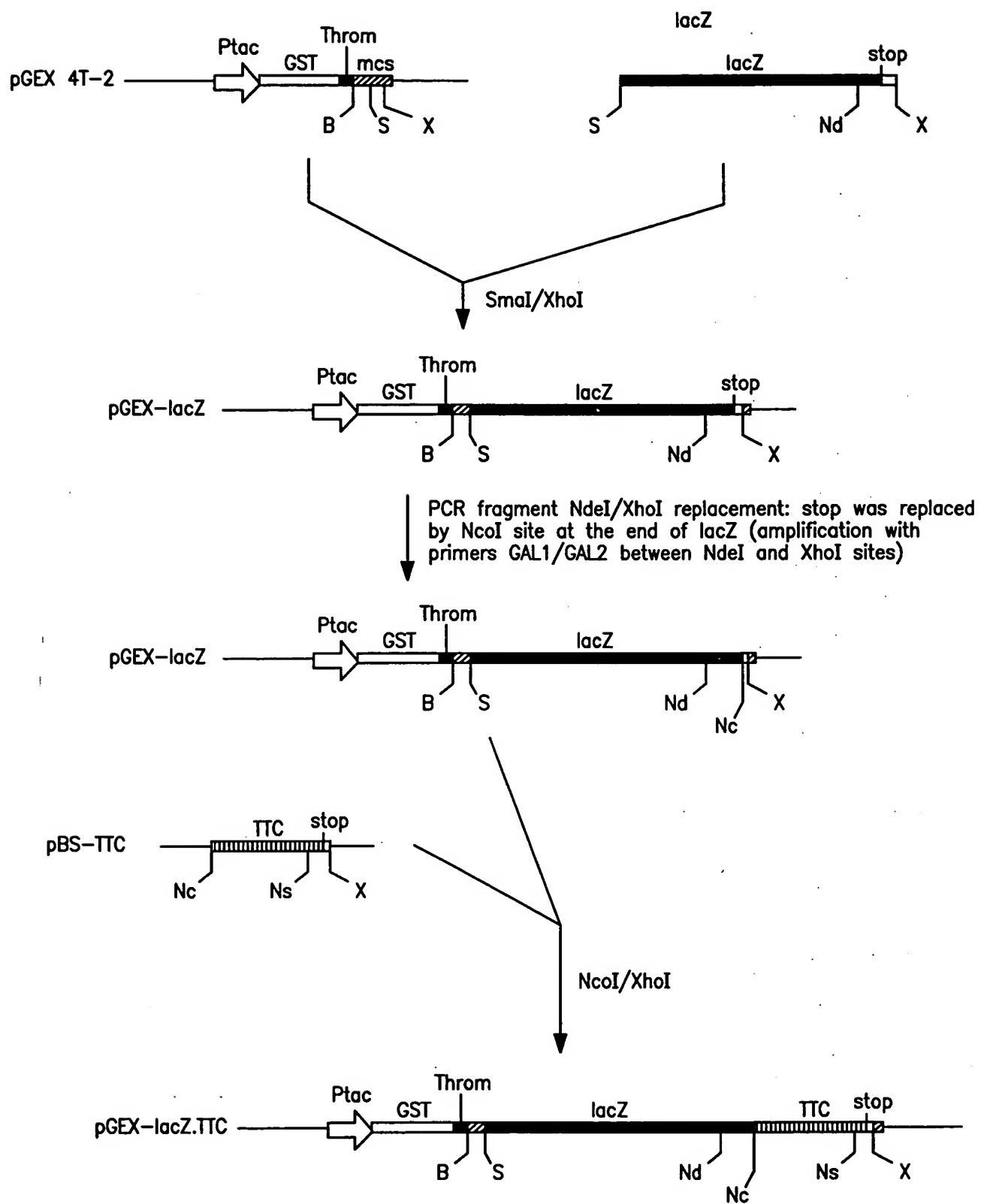


FIG. 3

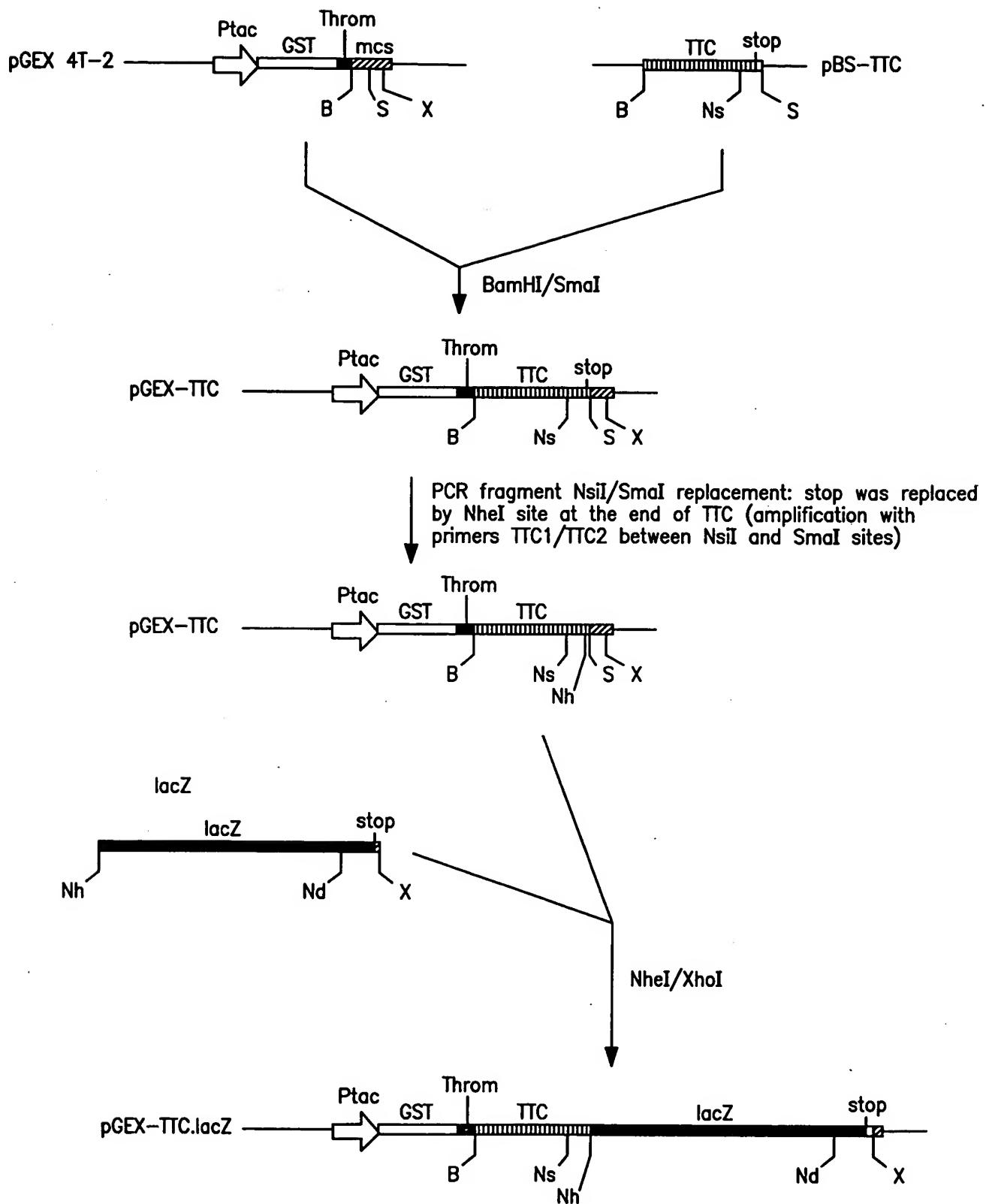


FIG. 4

pCMV.LACZ.TTC → Graphic Map
DNA sequence 8519 b.p. tagttattaata ... accgccccatgcatt circular

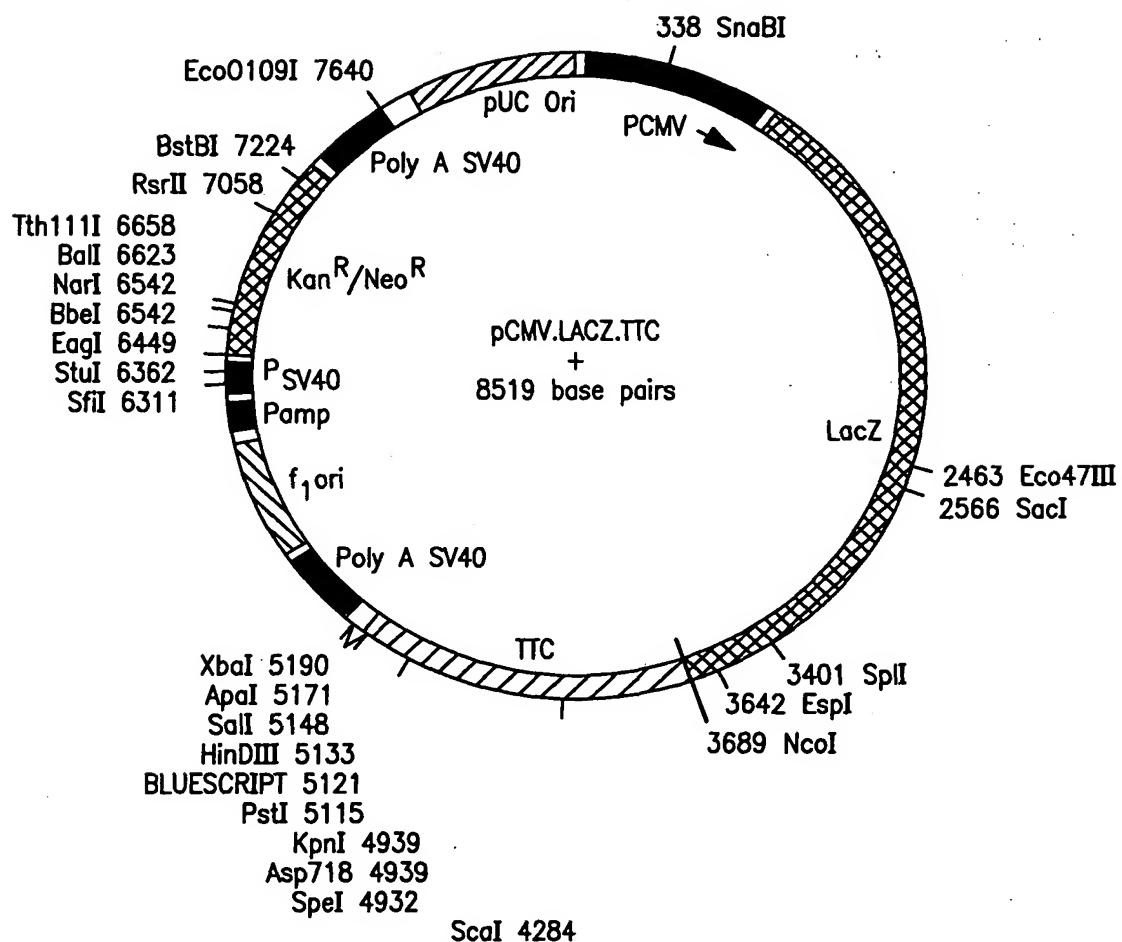


FIG. 5

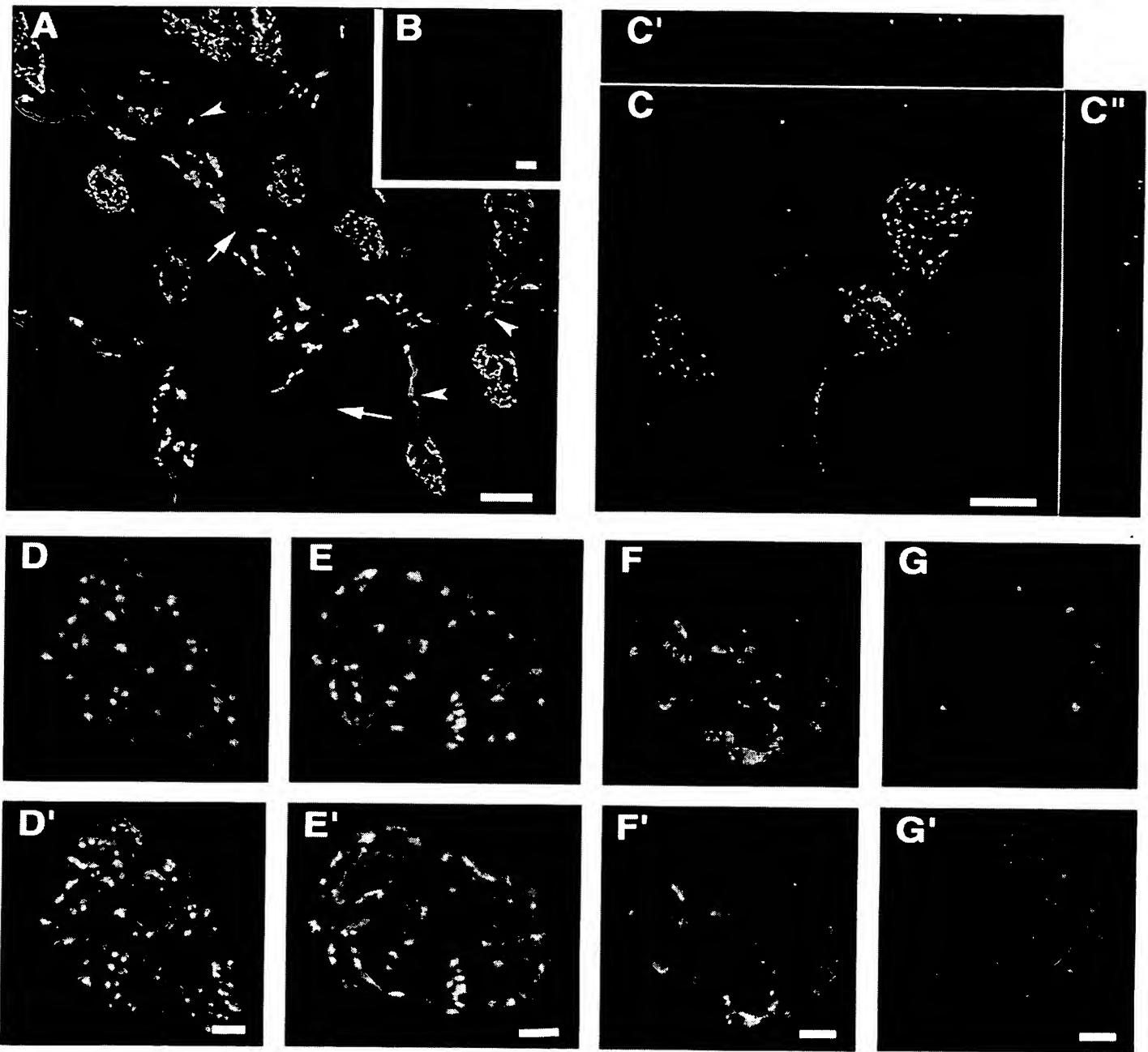
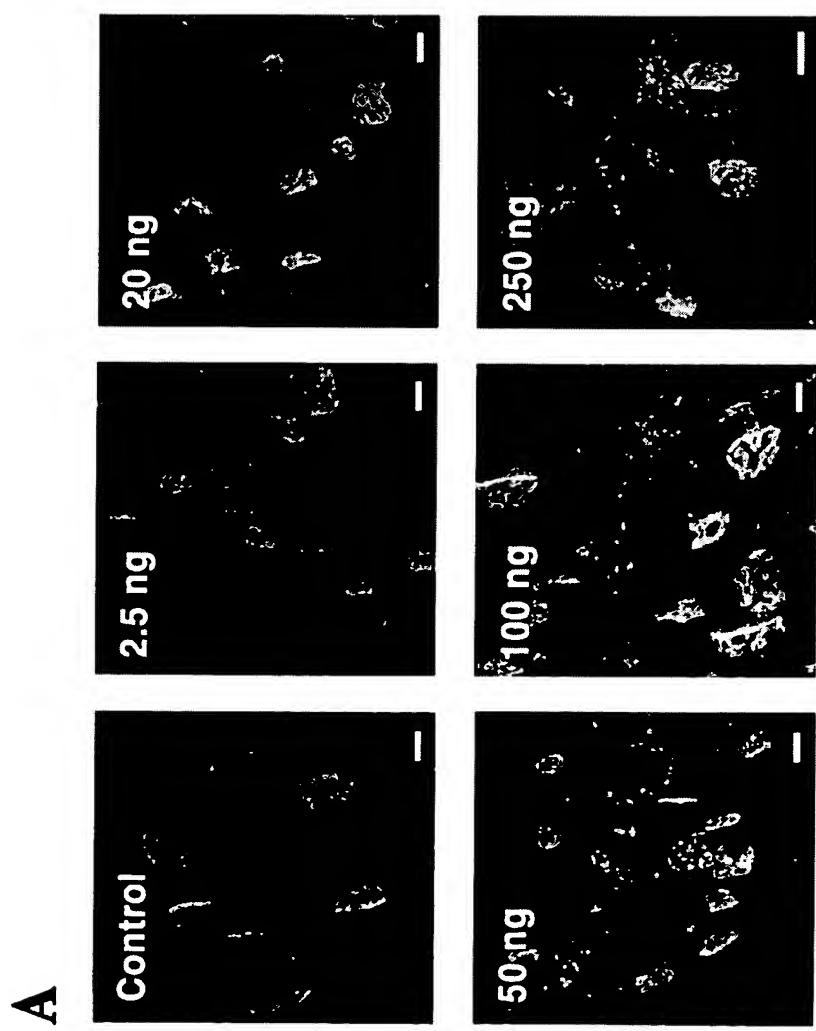


FIG. 6



B

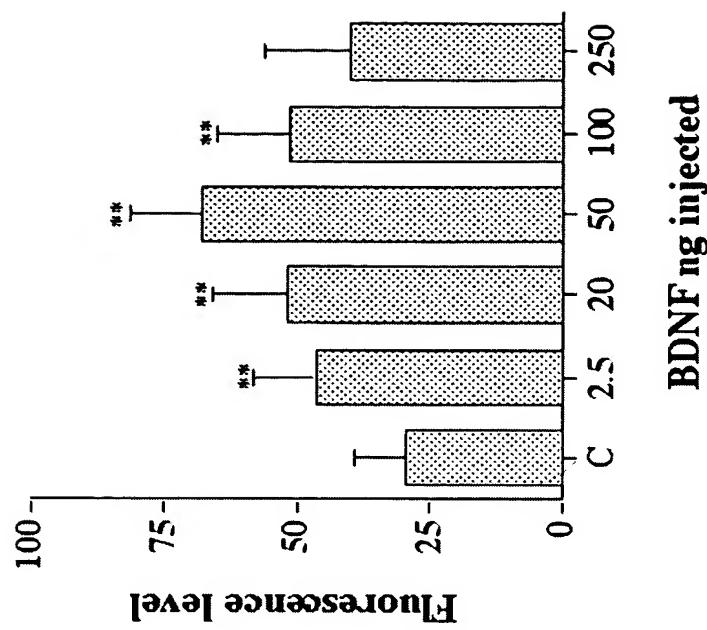


FIG. 7

GFP-TTC

TrkB

GFP-TTC/TrkB

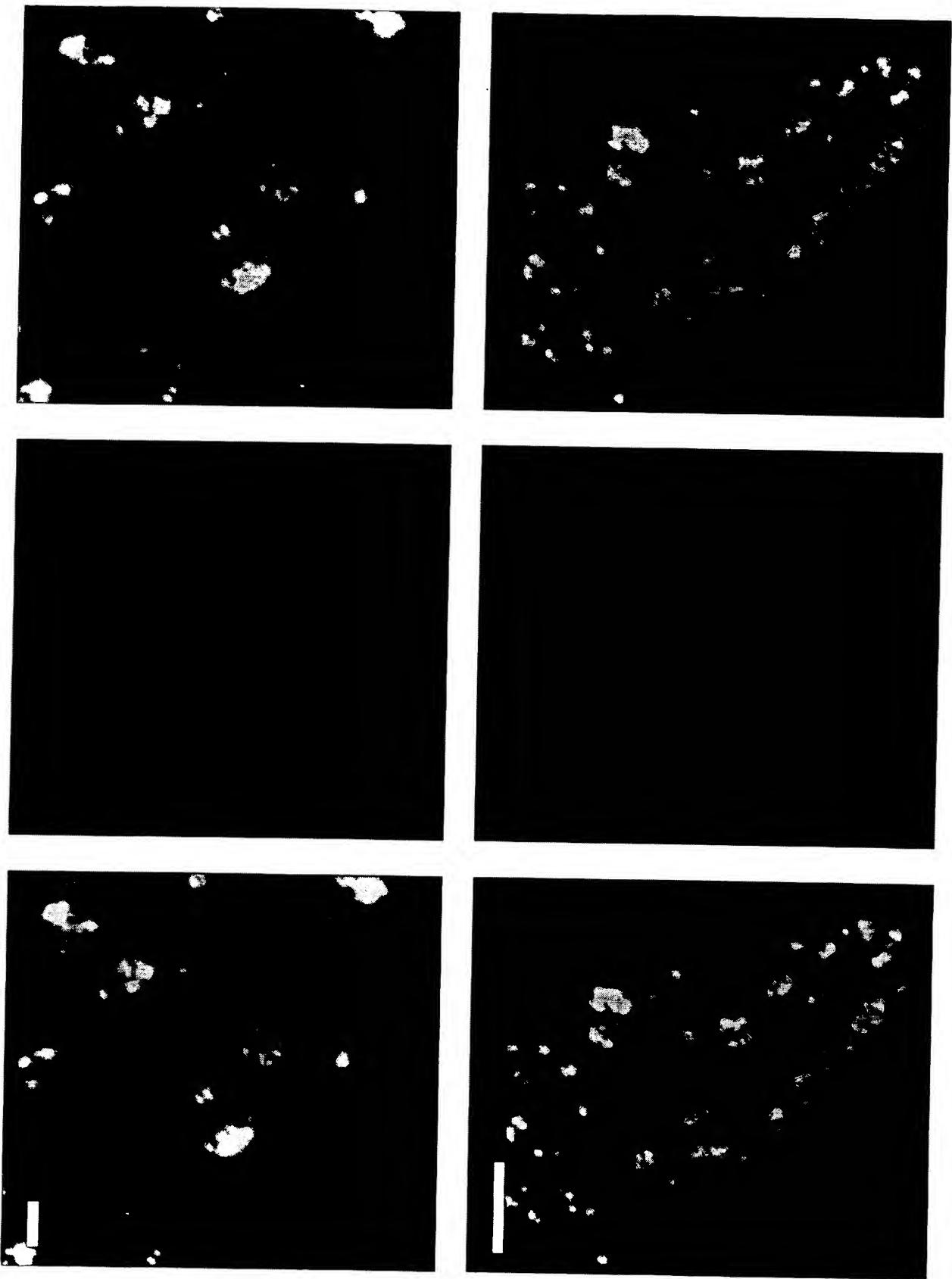


FIG. 8

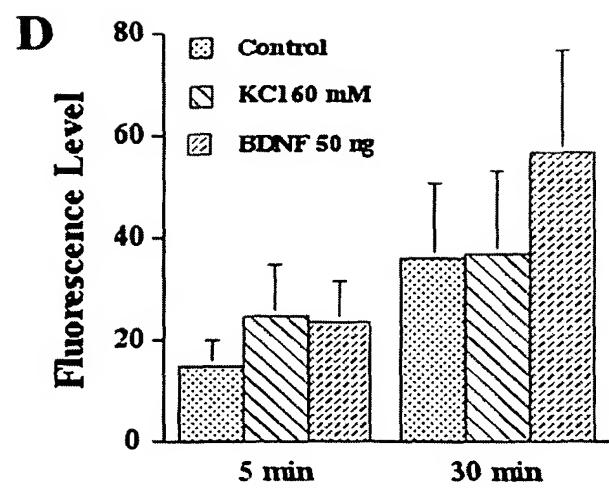
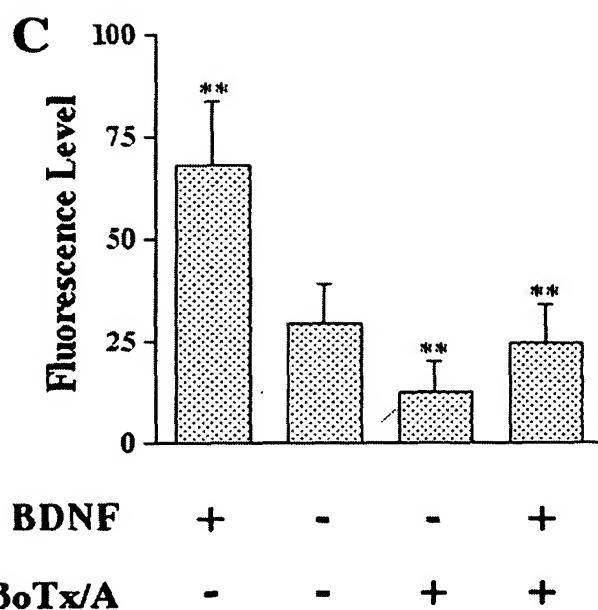
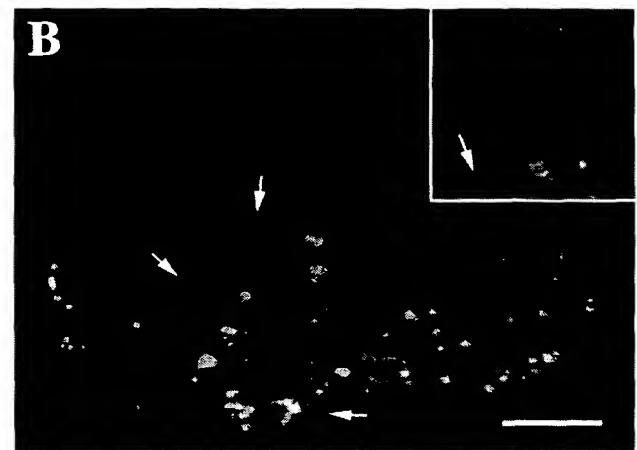
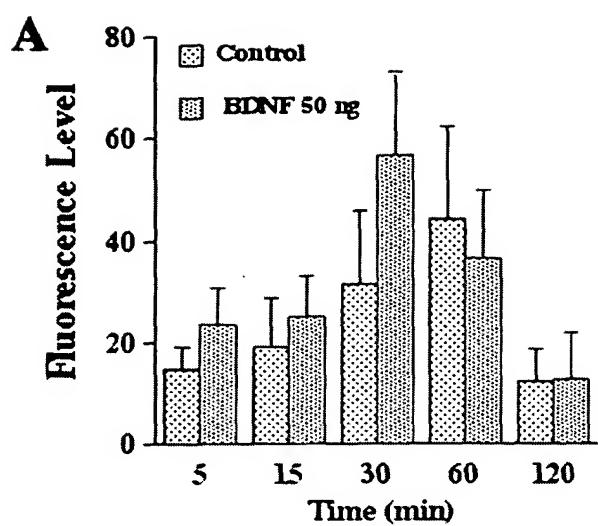


FIG. 9

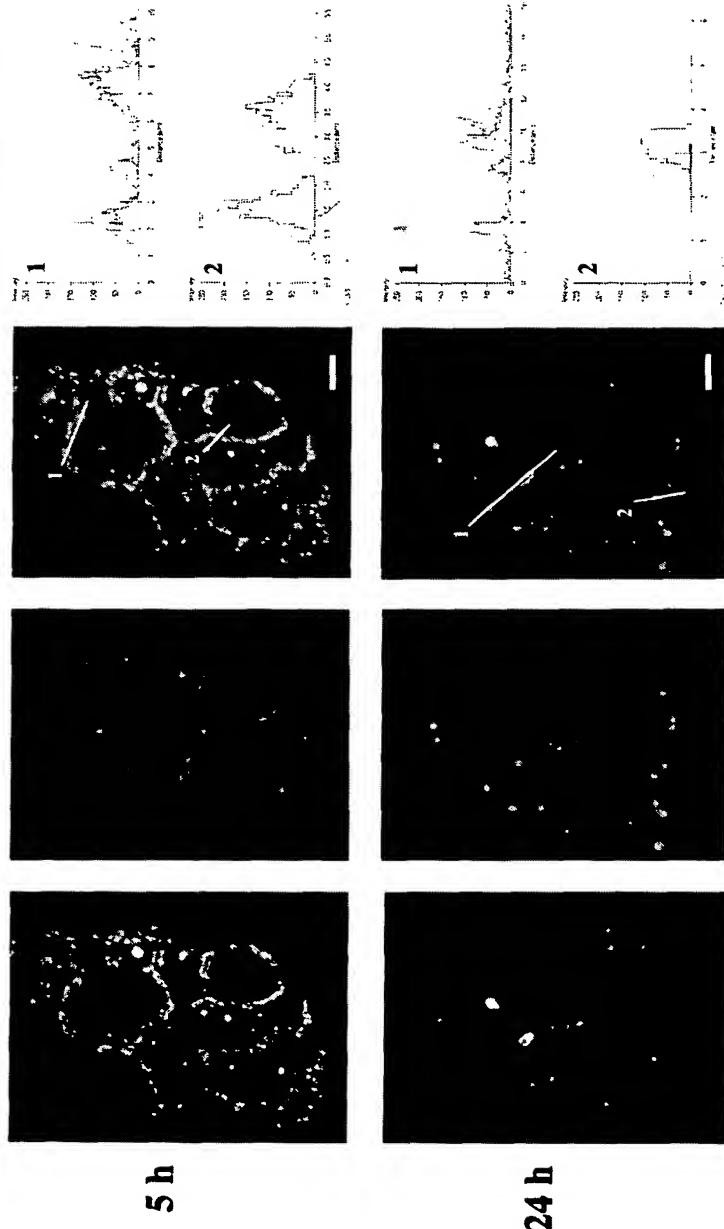
A

1 2 3 4 5 6 7 8 9 10 11 12

anti-GFP



anti-caveolin 3

**B**GFP-TTC CT-b Merge- α BTX Intensity Profiles**FIG. 10**

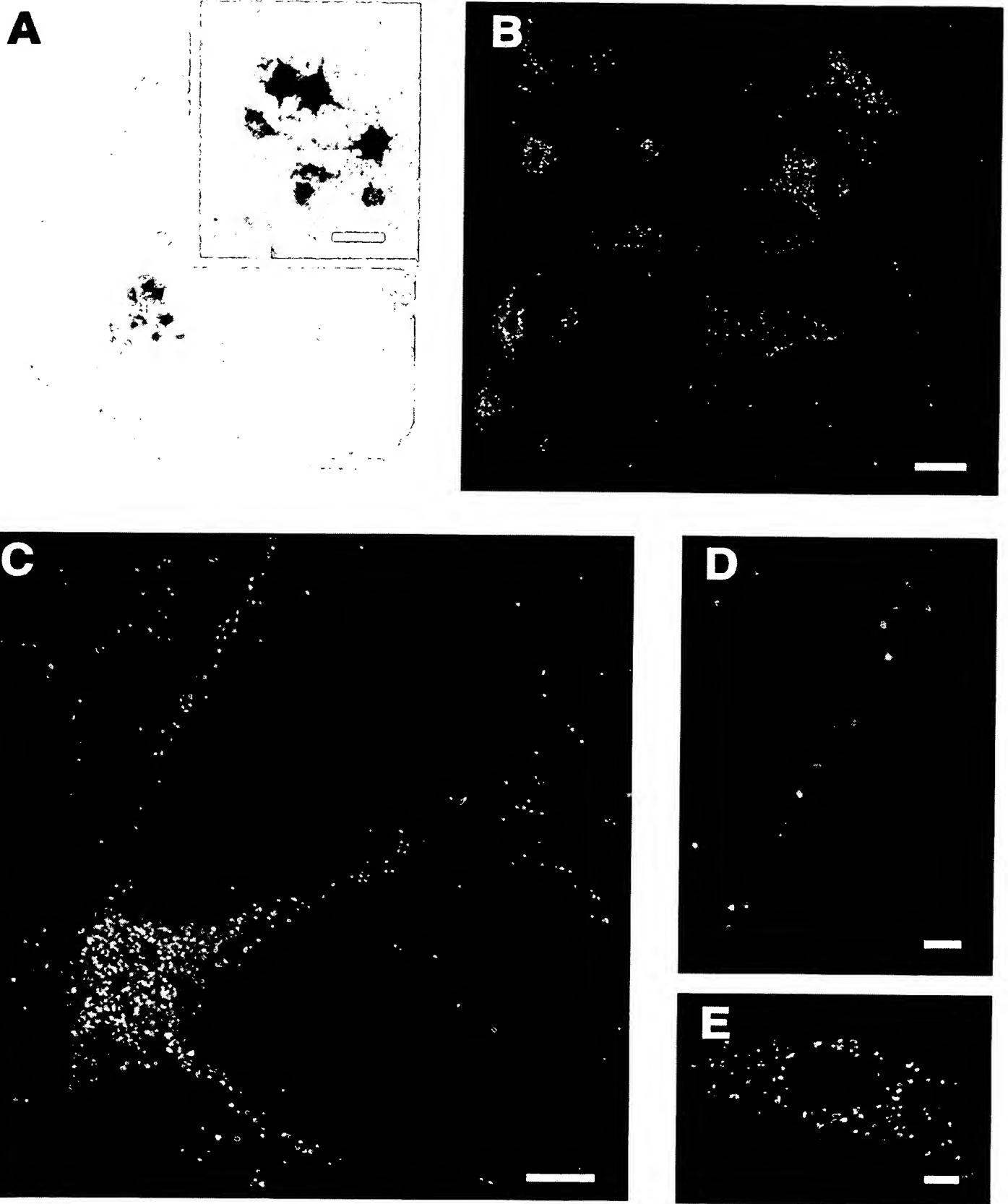


FIG. 11